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PRESS RELEASE

FOR IMMEDIATE RELEASE

Curtis Machine Tools' innovative new grinding machines provide double the output.

Impressive productivity in a small space with the new Vector Quad and Vector Pendulum

Colchester, Essex, 26th July 2019. Curtis Machine Tools ('CMT') today announced the world premieres of two revolutionary grinding machines at EMO Hannover; The Vector Quad and The Vector Pendulum, which will bring the grinding of small parts into a new era of productivity. The grinding machines are deemed to be groundbreaking because they have double the output compared to that of a conventional grinder. The innovation which is simple in principle and based on the doubling of work spindles (despite that the base area of the quad remains unchanged from that of the Vector twin). Equally, the Pendulum is a compact grinding machine with twice the capacity. Both machines are priced to make the productivity gains much more attractive than purchasing two separate machines.

CMT is one of the leading European manufacturers of grinding machines for small, high-precision components, such as diesel injectors and turbocharger parts. The two new innovations are suitable for use as either a single machine or can be integrated into a fully automated production line with the facility for ancillary processes to be incorporated as required.

Michael Scarfe, Managing Director of Curtis Machine Tools commented "We see this innovation as a revolution in grinding, as users actually get double the output, without having to pay twice as much."

The Vector Quad is equipped with four workpiece spindles and The Vector Pendulum with two workpiece spindles. This increases productivity when grinding large volumes of small parts (such as diesel injectors, turbochargers, hydraulic parts and cutting tools) to previously unimaginable heights. At the same time, the spark-to-spark time is reduced because the loading / unloading of the parts occurs automatically and in parallel with the grinding process.

The concept of the Vector Quad is based on the proven Vector Twin. However, the new machine has an indexing workhead with four spindles, enabling the outer diameters or contours to be ground simultaneously on two workpieces using the same grinding wheel. Conventional plunge grinding is equally possible as is peel grinding. The workpieces can have a maximum diameter of 45 mm and be held in either collets or chucks. Whilst two parts are being ground, either the standard loading system, or a robot, loads the two other spindles with the next two workpieces. "This not only halves the process time when grinding large volume parts, but also the spark-to-spark time drops to almost zero," said Scarfe.

CMT will also be unveiling another world premiere at the EMO exhibition when it showcases the Vector Pendulum. With this machine, the grinding wheel oscillates between two independent workheads, each of which is can be set up for different operations on the same component. With workhead inclination angles of up to 30°, the outer diameter and shoulder can be ground for small parts up to 50 mm in diameter and 150 mm in length. During oscillation from one workhead to the other, the grinding wheel can be dressed, giving the ability for the use of conventional grit grinding wheels, without the cycle time sacrifice for dressing, giving a low consumable cost, equally super abrasives can be used as the machine is capable of spindle speeds in excess of 100 m/s.

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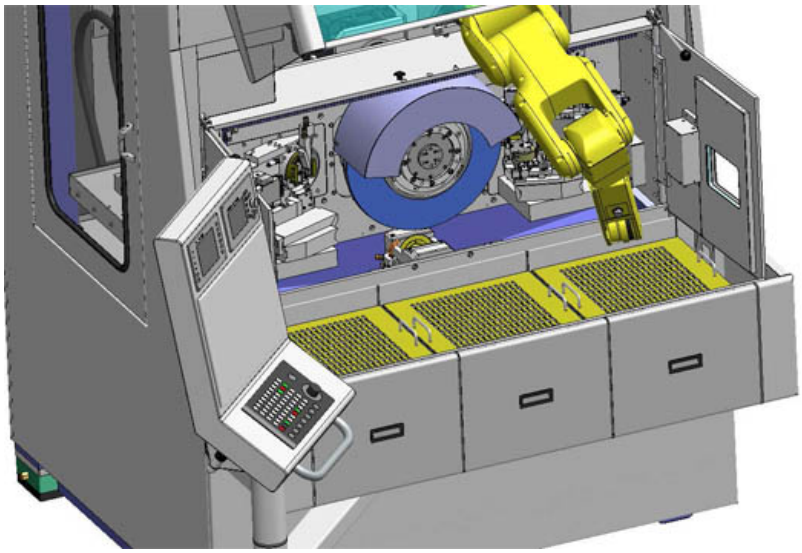
About CMT Curtis Machine Tools Ltd (http://curtisgrinding.co.uk)

Engineered grinding solutions for high precision volume production.

Curtis Machine Tools Ltd. is part of the Douglas Curtis Machine Tool Group, which was founded in 1973 by Douglas and Richard Curtis in Colchester, Essex. Over the years, CMT has developed into a specialist supplier of innovative grinding machines with integrated automation and process technology. With the patented Vector grinding technology, engineered grinding solutions are on offer, which give the customer a full turnkey solution from one supplier.

(Right) Picture no. -Vector-quad.jpg

Double the output with the same footprint: world first Vector Quad by CMT: Two workpieces ground simultaneously with automation in parallel giving a spark to spark time approaching zero.



(Left) Picture no. -Vector-pendulum.jpg

Two operations in one machine, worlds first Vector Pendulum by CMT: Like a pendulum, the grinding wheel alternates between two workpieces, dressing on route giving two operations in one machine.

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Die Welt der Metallbearbeitung

CMT in Hall 11, Stand C62